

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors:

Jiping Li; Peter G. Borden; Edgar B. Genio

Assignee:

Applied Materials, Inc.

Title:

High Throughput Measurement Of Via Defects In Interconnects

Serial No.:

10/813,407

Filing Date:

March 29, 2004

Examiner:

Trinh, Michael Manh

Group Art Unit:

2822

Docket No.:

BOX016 US

Confirmation No:

5642

Santa Clara, California September 6, 2005

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## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, §1.97 and §1.98, the Applicants submit for consideration in the above-identified patent application the documents listed on the accompanying Form PTO-1449. Copies of documents numbered 121-125 are also submitted herewith. The remaining documents are not attached hereto, because these documents are issued patents or publications which are readily available in the U.S. Patent and Trademark Office. The Examiner is requested to make all of the listed documents of record. Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

Item 125 identified in the attached PTO-1449 is a partial International Search Report (ISR) in a PCT application which claims priority from the *current application*. Note also that the attached partial ISR (item 125) cites items 113-115 in the attached PTO-1449 and item 19 in an earlier PTO-1449 filed on March 25, 2005. In that earlier PTO-1449 Applicants also listed two prosecution histories as items 97 and 101, which contain the two items marked "X" in the attached partial ISR (item 125).

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This Information Disclosure Statement is submitted after receipt of a restriction requirement but before a first Office Action on the merits. Accordingly, no fee should be required. If a fee is required, please charge the deposit account 50-2263 and identify the charge by using the docket number BOX016 US.

The information contained in this Supplemental Information Disclosure Statement is to the best of my knowledge and is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

Via Express Mail Label No. EV 581 855 712 US Respectfully submitted,

Omkar Suryadevara Attorney for Applicants Reg. No. 36,320

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SEP 0 6 2005

SISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

٦	Application No.:	10/813,407		
	Filing Date:	March 29, 2004		
	First Named Inventor:	Jiping Li		
	Group Art Unit:	2822		
	Examiner Name:	Trinh		
	Confirmation No.:	5642		
	Attorney Docket No.:	BOX016 US		

		U.S. Pat	tent Documents													
	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate										
107	6,040,936	3/21/01	Kim et al.	359	245											
108	6,720,248	4/13/04	Ryo	438	622											
109	6,747,355	6/8/04	Abiru	257	758											
110	4,873,434	10/10/89	See et al.	250	235											
111	6,541,747 B1	4/1/03	Kikuchi et al.	250	201											
112	2002/0167326 A1	11/14/02	Borden et al.	324	752											
113	2003/0165178 A1	9/4/03	Borden et al.	374	5											
114	6,387,715	5/14/02	David et al.	438	16											
115	2001/0017878 A1	8/30/01	Nozoe et al.	374	7											
116	6,330,361	12/11/01	Mitchell et al.	382	211											
117	4,201,087	5/6/80	Akita et al.	73	339											
118	6,178,020	1/23/01	Schultz et al.	359	107											
119	5,128,864	7/7/92	Waggener et al.	364	413											
120	5,304,931	4/19/94	Flamig et al.	324	309											
<u>'</u>	Other Art (Incl	luding Author	, Title, Date, Pertinent Page	es, Etc.)	. <b>.</b>	<u> </u>										
121	J.M. Ziman, F.R.S., "Principles of the Theory of Solids", 2nd Edition, Cambridge At the University Press 1972, pp 278-282															
Chung Wah See and Mehdi Vaez-Iravani, "Differential amplitude scanning optical microson applications", Applied Optics Vol. 27, No. 13, July 1, 1988, pp 2786-2792  123 International Search Report in PCT/US03/06250 which claims priority of US Application																
							Communication Relating To Results of Partial International priority of US Application 10/813,407 (current application)						earch in PCT/US05/009588, which claims			
								108 109 110 111 112 113 114 115 116 117 118 119 120  121 122 123 124	107       6,040,936         108       6,720,248         109       6,747,355         110       4,873,434         111       6,541,747 B1         112       2002/0167326 A1         113       2003/0165178 A1         114       6,387,715         115       2001/0017878 A1         116       6,330,361         117       4,201,087         118       6,178,020         119       5,128,864         120       5,304,931         Other Art (Inc.         121       J.M. Ziman, F.R.S., "Pri 1972, pp 278-282         122       Chung Wah See and Me applications", Applied Companies of the com	Date   107	Date   Name   107   6,040,936   3/21/01   Kim et al.   108   6,720,248   4/13/04   Ryo   109   6,747,355   6/8/04   Abiru   110   4,873,434   10/10/89   See et al.   111   6,541,747 B1   4/1/03   Kikuchi et al.   112   2002/0167326 A1   11/14/02   Borden et al.   113   2003/0165178 A1   9/4/03   Borden et al.   114   6,387,715   5/14/02   David et al.   115   2001/0017878 A1   8/30/01   Nozoe et al.   116   6,330,361   12/11/01   Mitchell et al.   117   4,201,087   5/6/80   Akita et al.   118   6,178,020   1/23/01   Schultz et al.   119   5,128,864   7/7/92   Waggener et al.   120   5,304,931   4/19/94   Flamig et al.   Other Art (Including Author, Title, Date, Pertinent Page   121   J.M. Ziman, F.R.S., "Principles of the Theory of Solids", 2nd Edit   1972, pp 278-282   122   Chung Wah See and Mehdi Vaez-Iravani, "Differential amplitude applications", Applied Optics Vol. 27, No. 13, July 1, 1988, pp 27   123   International Search Report in PCT/US03/06250 which claims priority of US	Date   Name   Class   107   6,040,936   3/21/01   Kim et al.   359   108   6,720,248   4/13/04   Ryo   438   109   6,747,355   6/8/04   Abiru   257   110   4,873,434   10/10/89   See et al.   250   111   6,541,747 B1   4/1/03   Kikuchi et al.   250   112   2002/0167326 A1   11/14/02   Borden et al.   324   113   2003/0165178 A1   9/4/03   Borden et al.   374   114   6,387,715   5/14/02   David et al.   438   115   2001/0017878 A1   8/30/01   Nozoe et al.   374   116   6,330,361   12/11/01   Mitchell et al.   382   117   4,201,087   5/6/80   Akita et al.   73   118   6,178,020   1/23/01   Schultz et al.   359   119   5,128,864   7/7/92   Waggener et al.   364   120   5,304,931   4/19/94   Flamig et al.   324   Other Art (Including Author, Title, Date, Pertinent Pages, Etc.)   121   J.M. Ziman, F.R.S., "Principles of the Theory of Solids", 2nd Edition, Cambrid 1972, pp 278-282   122   Chung Wah See and Mehdi Vaez-Iravani, "Differential amplitude scanning opt applications", Applied Optics Vol. 27, No. 13, July 1, 1988, pp 2786-2792   123   International Search Report in PCT/US99/12999 which claims priority of US Application   125   Communication Relating To Results of Partial International Search in PCT/US9	Date   Name   Class   Subclass   107   6,040,936   3/21/01   Kim et al.   359   245   108   6,720,248   4/13/04   Ryo   438   622   109   6,747,355   6/8/04   Abiru   257   758   110   4,873,434   10/10/89   See et al.   250   235   111   6,541,747 B1   4/1/03   Kikuchi et al.   250   201   112   2002/0167326 A1   11/14/02   Borden et al.   324   752   113   2003/0165178 A1   9/4/03   Borden et al.   374   5   114   6,387,715   5/14/02   David et al.   438   16   115   2001/0017878 A1   8/30/01   Nozoe et al.   374   7   116   6,330,361   12/11/01   Mitchell et al.   382   211   117   4,201,087   5/6/80   Akita et al.   73   339   118   6,178,020   1/23/01   Schultz et al.   359   107   119   5,128,864   7/7/92   Waggener et al.   364   413   120   5,304,931   4/19/94   Flamig et al.   324   309   Other Art (Including Author, Title, Date, Pertinent Pages, Etc.)   121   J.M. Ziman, F.R.S., "Principles of the Theory of Solids", 2nd Edition, Cambridge At the Unit 1972, pp 278-282   Chung Wah See and Mehdi Vaez-Iravani, "Differential amplitude scanning optical microscol applications", Applied Optics Vol. 27, No. 13, July 1, 1988, pp 2786-2792   123   International Search Report in PCT/US03/06250 which claims priority of US Application 09/095,805   125   Communication Relating To Results of Partial International Search in PCT/US05/009588, will see the state of the properties of the Communication Relating To Results of Partial International Search in PCT/US05/009588, will see the state of the properties of the PCT/US05/009588, will see the state of th			

Examiner:	Date Considered:			
* Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication with applicant.				